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Ownership Issues in the Digital Divide

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by

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Abstract

Ownership interests in the traditional broadcast and telecommunications media have been subject to restrictions by the Communications Act of 1934, the Telecommunications Act of 1996, and by FCC policies. For example, foreign ownership shares were limited from the beginning and financial qualification regulations for broadcasters were developed in 1965. In the 1970s, the Commission adopted policies to promote minority ownership of broadcast media. I have recently shown how one might measure the economic impact of these ownership policies.[1]

The Internet has developed along rather different lines. Although there was substantial government funding of the initial backbone networks—ARPAnet and NSFnet, the provision of private access via Internet service providers (ISPs) has been almost entirely unregulated. The same is true for content providers—commercial and non-profit, private and public. It now seems clear that "control" of the Internet, in terms of both access and content, is moving to the

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1. Yale M. Braunstein, *The FCC's Financial Qualification Requirements: Economic Evaluation of a Barrer to Entry for Minority Broadcasters*, 53 Fed. Comm. L.J. 69 (2000).

major communications and media firms. This raises questions about the usefulness and applicability of the traditional regulatory models, which I will raise only briefly. Disparities in access, whether on the basis of income or geographic location, have arisen and are the subject of most research on the "digital divide." My primary focus will be on ownership issues, such as the concentration of ownership of broadband access facilities, and the links between ownership of access and of content.

I. Definition and Context

In the introductory material, the organizers of the 14th Annual Computer Law Symposium define the digital divide as "the gap between those who have access to information technology and those who do not." Although several of the presentors argued for either broadening or refocusing the definition to include access to quality education and related areas,[2] even if we stay with a narrower approach, the concept remains somewhat unclear unless we become more specific. One set of definitions involves ownership of a computer with a graphical interface and a connection to the Internet. For example, the recent Department of Commerce report, *A Nation Online: How Americans Are Expanding Their Use of the Internet*, focuses on "Internet use" and distinguishes between households and individuals, on one hand, and having an Internet connection in the home and using it, on the other. The authors report that as of September 2001:

> 50.5 percent of households had Internet connections;
>
> 56.7 percent of the total U.S. population lived in households with these connections;
>
> 43.6 percent of Americans were using the Internet in their homes;
>
> 53.9 percent of the total population used the Internet at some location.[3]

Another definitional approach draws on evolving Internet access technology. One key determinant is broadband access or the lack thereof. Even here definitional questions remain: Are we referring to the availability or the use of broadband connections? If the latter, what factors determine the adoption of broadband once it is

2. *See, for example*, [in this issue]

3. U.S. Dept. of Comm., Econ. and Statistics Admin. and Natl. Telecomm. and Info. Admin., *A Nation Online: How Americans Are Expanding Their Use of the Internet*, <http://www.esa.doc/gov/508/esa/nationoline.hmtl> (February 2002).

available?

Discussions of policies to promote access (in both North America and Europe) often seem to ignore questions related to who provides the access. While this is normal in the broadband context, it is unusual in the broader contexts of telecommunications and broadcast media. In other telecom and media discussions, this area is known as "ownership" or industry structure. For example, the linkages between ownership, on the one hand, and access and content, on the other, are addressed in the various editions of *Who Owns the Media*, which also provides detailed lists of media owners and their interests.[4]

Furthermore, the question of "access to what?" is also generally ignored when discussing the digital divide. In other telecommunications and media discussions this area is known as "content." Policy concerns about content go at least as far back as former FCC Chairman Newton Minow's "vast wasteland" speech in 1961.[5] Generally, the Commission has refrained from direct regulation of content for First Amendment reasons. Nevertheless, there is a continuing understanding that decisions about media structure do influence content.[6]

The focus of the remainder of this paper is that issues related to ownership of the Internet—both of carriers and of content—should be addressed explicitly as they are likely to affect both access and use. The approach is to look at trends in telecommunications and broadcasting for lessons that may be applicable to the Internet. This leads to two major principles:

1. Discussions of the digital divide should include ownership/industry structure and content components as well as access.

2. Even without accepting #1, industry structure still affects (broadband) access.

II. Policies to Promote Access

There are several categories of policies to promote access. In the

4. Ben Compaine, *Who Owns the Media?: Competition and Concentration in the Mass Media Industry* (3rd ed., 2000).

5. Newton N. Minnow, Speech to the National Association of Broadcasters, May 9, 1961 (Available at: http://www.janda.org/b20/News%20articles/vastwastland.htm).

6. *See e.g.* P. O. Steiner, *Program Patterns and Preferences, and the Workability of Competition in Radio Broadcasting*, 66 Q. J. of Econ. 194-223 (May 1952) ; B. Owen, *Economics and the Freedom of Expression: Media Structure and the First Amendment* (Ballinger, 1975).

telephoneindustry, price regulation, interconnection requirements, and cross-subsidization—both overt and hidden—have been used as part of a "universal service" strategy to promote the penetration of telephones with over 90 percent of occupied housing units having telephone service since 1980.[7] In broadcasting, a "localism" model attempted to maximize the number of communities with at least one commercial radio broadcaster. This approach, modified for the reduced number of channels, was then applied to television broadcasting. The initial infrastructure of what was to become the Internet received subsidies in the form of the initial funding of the backbone and regional networks. The transfer in the mid-1990s from government/military/academic use to public/commercial use was accompanied by regulatory forbearance.

Discussions over access to traditional telecommunications service are commonly classified under the heading of "universal service." Mueller provides a historical analysis of how the meaning changed from the interconnection of competing network providers to the provision of service to the nation's households and businesses with the growth of the Bell System.[8] Following the passage of the Telecommunications Act of 1996, formerly hidden cross-subsidies have become more explicit. Recent research has focused on how competition[9], convergence[10], and the "doom of common carriage"[11] are affecting universal service concerns.

On the broadcast side, the choice was between maximizing the number of cities that had stations (localism) or the number of stations, and therefore networks, that could be received by the typical household (regionalism).[12] This trade-off was especially important in the allocation of VHF television licenses between 1945 and 1948, and the FCC's preference for localism was made explicit in its *DuMont*

7. U.S. Census Bureau, *Statistical Abstract of the United States*, Table 910 (2000 edition).

8. M. L. Mueller, *Universal Service In Telephone History: A Reconstruction*, Telecomm. Policy 12, 352-69 (July 1993).

9. *See* T. M. Valletti, *Introduction: Symposium on Universal Service Obligation and Competition*, Info. Econ. and Policy 12, 205-210 (September 2000) and the other articles in that issue.

10. *See e.g.* J. R. Schement, R. R. Pressman & L. Povich, Paper Preseneted, *Transcending Access Toward a New Universal Service* (*Universal Service in Context: A Multidisciplinary Perspective*, New York Law School, December 6, 1995) <http://www.benton.org/Policy/Uniserv/Conference/transcend.html>.

11. Eli M. Noam, *Beyond Liberalization: The Impending Doom of Common Carriage*, 18 Telecommunications Policy 435 (1994).

12. Roger G. Noll, Merton. J. Peck & John J. McGowan, *Economic Aspects of Television Regulation,* 99-101 (Brookings Inst., 1973).

decision, which restricted the number of VHF stations in most markets to two or three.[13] The works of Steiner and Owen focused on the number of competing outlets in a market and the structure of that market, respectively.[14] The overall conclusion was that, for a given organizational arrangement, the more competing outlets, the greater the diversity in programming. These issues continue to be debated today in discussions of the national network ownership cap, the dual-station rule, and the prohibition of satellite broadcasters from offering out-of-region network affiliates.

The issue then is whether any of these approaches apply to an interactive world. It is necessary to ask a few basic questions: First, how interactive is web browsing? If it is not very interactive, maybe one or more of the "old" approaches is sufficient. Second, how many of those online create content? A related question is whether this is an important concern or whether the *ability* to create content is the issue. In either case, do we then need to focus on content-creation skills and access to web servers and resources? These fundamental questions are addressed both by other papers in this symposium and, on a more practical level, by work such as the Creating Community Connections project at Massachusetts Instistue of Technology.[15]

Regardless of whether interactivity changes the dimensions of access, there is evidence that industry structure plays an important role in access. This is as true for broadband Internet access as it is for the telecommunications and broadcasting cases described above. *A Nation Online* shows clearly that income levels affect both computer and Internet use[16] and online activities.[17] The report also discusses the role of cost of Internet access alone and the interplay between cost and income as barriers to home Internet connections.[18] There is evidence that increasing concentration in the provision of DSL broadband service to homes has been accompanied by an increase in the price of that service. Looking at one specific case, incumbent local exchange carrier (ILEC) SBC/Pacific Bell raised its monthly rates for residential ADSL in California from $39.95 to $49.95 in February 2001. During the five quarters from early 2000 to early

13. *Sixth Report on Television Allocations*, Fed.Commun. comm Radio Regulations 91:601 (April 14, 1952).

14. *See supra* n. 5.

15. Randal D. Pinkett, *The Creating Community Connections (C3) System Project* Report submitted to the U.S. Dep. of Com., Ars Portalis Final Report (June 18, 2001).

16. *A Nation Online, supre* n. 3 10, fig. 2-2.

17. *Id.*, 33, tbl 3-1.

18. *Id.*, pp. 76-78.

2001, the ILEC share of the DSL market increased from just below 75% to 83% while the competitive local exchange carriers (the CLECs) share declined from 23.7% to 16.2%. During the first quarter of 2001, the time of the price increase, the ILEC's share of the residential market increased from approximately 88% to over 90%.[19] (Inter-exchange carriers serve the remaining share of the market.)

III. Policies to Promote Ownership Diversity

Ownership diversity and industry structure have been subject to an inconsistent mix of policies across media types. There have been a variety of approaches and debates relating to ownership of new wireless carriers and cable and broadcast television providers, each of which provides lessons for similar questions involving the Internet.

A. Wireless Telephony

Diversity of ownership issues have arisen in the licensing of another new technology, cellular telephone service. The original set of licenses was originally awarded following comparative hearings. The parties incurred significant expenses and were subject to lengthy time delays. The comparative hearings were replaced by auctions, which led to high prices, limiting the role of small and minority-owned businesses. To partially address this situation Congress allowed for "designated entities" in the *Omnibus Budget Reconciliation Act of 1993* with the stated objective of:

> . . . promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women . . . .[20]

In discussing the intent of this provision, Munson states:

> The House Report explained the second objective in further detail. First, the committee intended the FCC to use a common sense approach to avoid concentration of licenses, not any particular test . . . . Finally, the [House] committee included minority

19. Yale M. Braunstein, *Market Power and Price Increases in the DSL Market* <available at: http://www.sims.berkeley.edu/~bigyale/dsl.html> (July 2001).

20. 47 U.S.C. § 309(j)(3).

> groups and women in order to ensure that such individuals would not be excluded by the competitive bidding system.[21]

Despite the stated intention, the application of this provision in the 1996 PCS auction proved unrealistic. Several of the "successful" bidders failed to obtain the necessary financing and filed for protection under the bankruptcy statutes. So far there is no resolution, but it is interesting to note that the solution considered and rejected by the last session of Congress dealt only with NextWave and ignored the parallel situation of those bidders with substantial minority ownership.[22]

B. Cable Television

In many aspects the debate over "separations" policy for cable television provides a rich set of parallels.[23] Several times, the FCC and the courts were faced with the question of whether common carriage and the separation of program production from ownership of local facilities via a system of channel leasing, on one hand, or allowing integration between program producers and local operators, on the other, was the appropriate model for the cable industry. This came to a head in 1979 when the Supreme Court ruled in *Midwest Video*, which concern public access requirements, that cable television did not constitute common carriage.[24]

Broadcasting

There have been competing and overlapping trends in the development and application of minority ownership policy in broadcasting. Policies and decisions encouraging minority ownership have included:

1. *Nondiscrimination Employment Practices*[25] (1968)

21. Mark W. Munson, *A Legacy of Lost Opportunity: Designated Entities and the Federal Communication Commission's Broadband PCS Spectrum Auction*, 7 Mich. Telecomm. Tech. L. Rev. 217 (2001) <*http://www.mttlr.org/volseven/*Munson.html>.

22. H.R. 3484, *Prompt Utilization of Wireless Spectrum Act of 2001*, (Dec. 13, 2001).

23. *See e.g.* Fred H. Cate, Donna N. Lampert & Frank W. Lloyd, *Cable Television Leased Access* (The Annenberg Washington Program in Communications Policy Studies of Northwestern University, Washington, D.C., 1991) <http://www.annenberg.nwu.edu/pubs/cable/>.

24. *Midwest Video Corp. v. FCC*, 571 F.2d 1025 (8th Cir. 1978), aff'd 440 U.S. 689 (1979).

25. Nondiscrimination Employment Practices for Broadcast Licensees, *Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 13 FCC 2d 766, para., 26, 13 Radio Reg. 2d (P&F) 1645 (1968).

2. Minority Tax Certificates[26] (1978-1995)
3. *Distress Sale Policy*[27] (1978), declared unconstitutional 1989[28]
4. *Metro Broadcasting*[29] (1990)

Among the policies and decisions that worked in the other direction are:

1. Financial Qualification Requirements following *Ultravision*[30] (1965)
2. *Adarand*[31] (1995)
3. *Lutheran Church-Missouri Synod*[32] (1998)

Adarand, of course, was not a broadcast license decision, but the overall result of it and the other decisions is that it is now legal to give preferences to small businesses but not explicitly to minorities or women.

Possibly the most important policy changes affecting station ownership are the move toward spectrum auctions—raising the price of the spectrum for all purposes, the lifting of the station ownership limits,[33] and the grants of additional spectrum to the existing television broadcast licensees.[34] Each of these has increased the price of new and existing licenses and, as a result, raised barriers to entry. One can quantify the costs to the minority community of policies that create barriers to entry, thereby reducing or eliminating the prospects for diversity in ownership of broadcast facilities.[35]

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26. 26 U.S.C. § 1071 (1982) and 26 C.F.R. §§ 1.1071-3 (1989). For a recent reappraisal, see E. G. Krasnow & L. M. Fowlkes (1999). "The FCC's Minority Tax Certificate Program: A Proposal for Life After Death," *Fed. Comm. L. J.* 51(3): 665.

27. Statement of Policy on Minority Ownership of Broadcast Facilities, *Public Notice*, 68 FCC. 2d 979, 983 (1978), 42 Rad. Reg. 2d (P&F) 1689, 1695-96 (1978). For an analysis, see also Lebowitz, *FCC Minority Distress Sale Policy: Public Interest v. the Public's Interest*, Wis. L. Rev. *365* (1981).

28. *Shurberg Broadcasting of Hartford, Inc. v. FCC,* 876 F.2d 902 (D.C. Cir. 1989), rev'd 497 U.S. 547 (1990).

29. *Metro Broadcasting, Inc. v. FCC* , 497 U.S. 547 (1990).

30. Ultravision Broadcasting Co., *Memorandum Opinion and Order*, 1 FCC. 2d 544, 5 Rad. Reg. 2d (P&F) 343 (1965), modified, 72 F.C.C. 2d 784, 45 Rad. Reg. 2d (P&F) 925 (1979).

31. *Adarand Constructors v. Pena*, 515 U.S. 200, 200 (1995).

32. *Lutheran Church-Missouri Synod v. FCC* (1998), 141 F 3d 344, 344 (D.C. Cir.).

33. *See e.g.* The *Telecommunications Act of 1996,* Pub. L. No. 104-104, 110 Stat. 56, 47 U.S.C. § 202(h) (West 1996), which directs the FCC to review these policies every two years, and *Fox Television Stations, Inc. v. FCC,* 280 F.3d 1027, 1027 (D.C. Cir. 2002).

34. See T*elecommunications Act of 1996*, 47 U.S.C. § 336 (West 1994), and Thomas G Krattenmaker, *The Telecommunications Act of 1996*, 49 Fed. Comm. L. J., (November, 1996).

35. Yale M. Braunstein, *The FCC's Financial Qualification Requirements: Economic Evaluation of a Barrier to Entry for Minority Broadcasters*, 53 Federal Communications

Internet

The ownership models for the Internet is a changing mix. The current model can be characterized as hierarchy with backbones and internet exchange points owned by very large carriers with a mix of large and small ISPs providing access at the retail level. The Tier-1 ISPs generally have access to the global Internet Routing Table and do not buy network capacity from other providers. Examples include Cable & Wireless (C&W), Sprint, Qwest, AT&T, and Worldcom. The Tier-2 ISPs lease part or all of their network and generally have a national or nearly-national presence. Examples include AOL, Earthlink, and former cable-based ISPs such as @home. The Tier-3 ISPs are regional, with no national backbone.

These definitions are not quite so clear in practice.[36] Depending on changes in the market and on the prospects for legislation such as the pending "Tauzin-Dingell" bill, there may be additional consolidation.[37] Tauzin-Dingell would permit ILEC entry into Level 1, possibly leading to further ILEC control of DSL, with the effect of driving out smaller ISPs.

Drawing a parallel with broadcasting, there may be a relationship between the number of smaller, locally-owned ISPs and content.[38] Similarly, there may be a relationship between diversity in ownership and diversity in content. Also, with ILEC entry into Tier 1, there is the possibility for tying arrangements and bottlenecks. One question is whether these issues that have arisen in the broadcasting and telecommunications contexts also apply to the Internet.

Law Journal 69-90 (December 2000).

36. See Rob Frieden, *Without Public Peer: The Potential Regulatory and Universal Service Consequences of Internet Balkanization*, 3 Va. J. L. & Tech. 8 (Fall 1998) and Rob Frieden, *Revenge of the Bellheads: How the Netheads Lost Control of the Internet,* (forthcoming, 2002).

37. *The Internet Freedom and Broadband Deployment Act* (H.R. 1542), (passed by the House, February 27) (2002).

38. *Economics, supra* n. 5, and Yale M. Braunstein, *The Potential for Increased Competition in Television Broadcasting—Can the Market Work?*, Telecommunications Policy and the Citizen (T. Haight ed. Praeger, 1979).

This point was the basis for a recent editorial in the trade press:

> [The relationship between diveristy in ownership and diversity in content is] the crucial reason independent ISPs should be protected from telco dominance. This is far more than a business competition issue, but rather goes right to primary concerns about diverse points of view and innovative new uses of the net. Cable TV notoriously blocks most channels, providing a "walled garden" of limited choice. This must not be extended to the Internet, but DSL providers like SBC (one third of the country) have exactly that in their plans. Contracts SBC demands of ISPs force video speed traffic to bypass the ISP and go directly to SBC and pay an extraordinary toll. Mike Powell spoke eloquently to me two years ago, about how the availability of video on the net would allow choices far beyond broadcast TV, and how such innovation must not be choked off.
>
> That's why we need independents. DV cameras, Avids and Mac editing, and other inexpensive video tools will soon make it possible for hundreds of churches to webcast their Sunday services. Every college with a football or basketball team can broadcast to their campus and the rest of the world. Texas could receive TV channels from Punjab, Israel, Poland, Italy, and the U.S. Navy. Comcast won't carry them, forbidding video in their terms of service. SBC plans the same, seeing this as a "value-add" and finding technical means of effectively blocking programming. Cisco proudly explains how their routers can select preferred channels.[39]

But there is a separate industry structure issue, even if content is not affected. And as I have discussed in Section II above, industry structure influences prices and access.

IV. Conclusion

Both economic theory and empirical evidence point to linkage between ownership issues, concentration, and industry structure—on one hand—and broadband prices and the adoption of technologies

39. D. Burstein, *Editorial: Tell the Chairman* <http://www.dslprime.com/> (April 30, 2002).

such as xDSL on the other. This connection has been acknowledged in the trade press and elsewhere.[40] Policies that keep the price of Internet access high exacerbate the digital divide, and policies that keep the price of broadband access high intensify the differences in access of differing income groups.

In conclusion, the evidence as to whether ownership and industry structure affect content is mixed. The theoretical relationship between increasing the number of separately owned and controlled outlets and increasing diversity of content is clear and supported by empirical evidence. But the linkage between specific types of owners and content is less clear and still the subject of debate.[41] There is somewhat stronger evidence that industry structure and regulation has directly affected possibilities for entry and the distribution of wealth in the traditional broadcast media[42], and is having similar effects in new media and Internet industries.[43]

40. Id.

41. A. S. Hammond, IV, *Measuring the Nexus: The Relationship Between Minority Ownership and Broadcast Diversity after Metro Broadcasting*, 51 Fed. Comm. L. J. 627 (May 1999).

42. Id.

43. M. Ford-Livene, *The Digital Dilemma: Ten Challenges Facing Minority-Owned New Media Ventures*, 51 Fed. Comm. L. J. 577, 597-599 (May 1999).

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